

WE CLAIM:

1. A method of integrating a polishing pad with a belt to form an integrated pad and belt for polishing a surface, comprising the following steps:
forming a belt; and
integrating said belt with a polishing pad formed during said integrating step to form an integrated pad and belt, said integrated pad and belt comprises a polishing surface.
2. The method of claim 1 wherein said polishing surface of said integrated pad and belt comprises a seamless polishing surface.
3. The method of claim 1 wherein said polishing pad of said integrated pad and belt comprises a polymeric material.
4. The method of claim 1 wherein said step of integrating said polishing pad with said belt comprises molding said polishing pad onto said belt that produces a seamless surface on said integrated pad and belt.
5. The method of claim 1 wherein said belt of said integrated pad and belt comprises one or more of an aramid, cotton, metal, metal alloy, or polymeric material.
6. The method of claim 1 wherein said belt of said integrated pad and belt comprises a tensile material and a reinforcing material.
7. The method of claim 1 wherein said tensile material further comprises an aramid material and said reinforcing material further comprises a cotton material.
8. A method of forming an integrated pad and belt for use in polishing a semiconductor wafer, the method comprising:
weaving a first and a second material into an endless belt; and

molding a semiconductor wafer polishing pad material onto the endless belt in a seamless manner and integrating the semiconductor wafer polishing pad material and endless belt in a single step.

9. The method of claim 8, wherein the first material comprises an aramid fiber.

10. The method of claim 9, wherein the second material comprises a cotton fiber.

11. The method of claim 8, wherein the step of molding the semiconductor wafer polishing pad material comprises molding the semiconductor wafer polishing pad material onto the endless belt using an adhesive molding process.

12. The method of claim 8, wherein the semiconductor wafer polishing pad material comprises a polymeric material.

13. The method of claim 12, wherein the polymeric material comprises polyurethane.

14. The method of claim 8, wherein the step of weaving the first and second materials comprises weaving the first material in an intended direction of linear motion for the endless belt and weaving the second material in an angularly offset direction from the intended direction of linear motion.

15. A method of forming an integrated pad and belt for use in polishing a semiconductor wafer, the method comprising:

forming a belt; and

extruding a semiconductor wafer polishing pad material onto the belt and integrating the semiconductor wafer polishing pad material with the belt in a single step to form the integrated pad and belt.

16. The method of claim 15, wherein forming the belt comprises joining opposite ends of a material to form an endless loop and wherein the material comprises at least one of metal, aramid material, cotton and polymeric material.

17. The method of claim 15, wherein forming the belt comprises weaving an aramid fiber in a direction of intended linear movement of the belt and a cotton material in a direction at an angle to the direction of intended linear movement to form a rectangular piece and weaving together two ends of the rectangular piece to form an endless loop.

18. The method of claim 15, wherein forming a belt comprises forming a belt having a thickness in a range of 0.01 inches to 0.2 inches.

19. The method of claim 18, wherein a polishing surface of the semiconductor wafer polishing material is formed with a plurality of indentations.

20. The method of claim 19, wherein the step of extruding the semiconductor wafer polishing pad material comprises forming the polishing surface in a seamless manner and eliminating propagation of any defects in the belt through to the polishing surface.